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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,222	09/14/2000	Charles Coulier	032326-080	8563
21839 7590 07/18/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER BROWN, CHRISTOPHER J	
			ART UNIT 2134	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/601,222

Applicant(s)

GEMPLUS

Examiner

Christopher J. Brown

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 5-7 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Request for Continued Examination has been accepted and entered.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, and 4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter. Claim 1 is a system that is completely comprised of functional descriptive material. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component.

When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. See MPEP 2106.01

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A) in view of Barkley US 6,202,066.

As per claim 1 Proust et al. (6,216,014 B1) teach a system of managing the security of data processing applications (see col.3, lines 37-40 where a system of managing of applications by secure means is disclosed), comprising:

Directory in which the data processing applications are stored (see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications), said directories being organized in an n-level tree (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure); and

A number of security registers, which are selectively allocatable to any one of a plurality of said directories, each security register containing all rights or secrets which have been

Art Unit: 2134

granted under the directory to which it has been allocated (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme and authentication mode and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights) but do not disclose that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory. However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)'s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional

Art Unit: 2134

hardware by utilizing the slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

Neither Proust or Jennings, III teach granting rights that are de-allocatable from said one directory and allocatable to another directory.

Barkley teaches granting of rights that may be de-allocatable from one and allocatable to another at any time, where object access types that may be edited, assigned and removed from objects. (see col 7 lines 25-40, 50-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Barkley's allocation and de-allocation of rights with the directories of Proust in order to provide easy modification to the rights in said directories.

As per claim 2 Proust et al. (6,216,014 B1) teach a method of managing the security of data processing applications, comprising the steps of:

selecting one of a plurality of directories that are organized in an n-level hierarchy (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure);

storing in an allocated security register rights granted under the directory to which said register has been allocated, according to given rules (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication

mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application are corresponding to given rules; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme (given rule) and authentication mode (authentication rule) and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights). seeking the secrets presented in a directory in which a data processing applications is stored (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure where examiner considers the root directory or master file directory represent the highest level directory or level 1 directory as a root directory where other subdirectories are under such directory; and see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications); and

(c) verifying the knowledge of one or more rights at the level of the data processing application (see fig.6-9 where knowledge of one or more rights such as security scheme of application or security attributes or secret reference or authorization mode is verified in relation with one another; col.12, lines 58-61 where a right of access to Loyalty remote

applications is verified by verifying access condition “private”) **but do not disclose explicitly** that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory.

However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a single directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory and therefore any retrieval of files from any location that corresponds to security register in the memory is under a directory). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)’s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional hardware by utilizing the slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A) however do not explicitly disclose de-allocation with respect to directories and their corresponding registers.

Art Unit: 2134

Barkley teaches granting of rights that may be de-allocatable from one and allocatable to another at any time, where object access types that may be edited, assigned and removed from objects. (see col 7 lines 25-40, 50-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Barkley's allocation and de-allocation of rights with the directories of Proust in order to provide easy modification to the rights in said directories.

As per claim 4 Proust et al. (6,216,014 B1) teach a method according to claim 2 wherein said seeking step is performed according to the following rule: verifying that the secret presented is known in the current directory (Ni) or in a directory at a higher level of the hierarchy (see col.8, lines 1-24 where upon authentication of access value such as "private access" or "shared access" that corresponds to verification of a secret presented in a master file or file under master file where the master file corresponds to root directory and files under it corresponds to sub-directories access is permitted and therefore upon authentication secret known in a subdirectory or files under the master files that corresponds to directory Ni or its higher directory that corresponds to master file which itself corresponds to higher directory is verified).

Allowable Subject Matter

Claims 3, and 5-7 are allowed over the prior art of record, as stating in the prior actions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher J. Brown

6/27/07

CJB
Christopher J Brown